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AESTRACT

Articles, reports of international activity, and reviews of new publications in the area of conservation and environmental education are contained in this newsletter of the international Union for the Conservation of Nature and Natural Resources, Commission on Education. Those interested in receiving the newsletter regularly should request that their name be placed on the mailing list. (JIE)



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July/September 1970

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Information sheet for members of the Commission and its Regional Committees, members of IUCN Executive Board and other missions, and for all persons interested in environmental and conservation education. Published by IUCN.

Ricr: Dr. Jon Cerovsky, Education Executive Officer, IUCN, 1110 Marges, Switzerland. Secretary: Inna A. d'Accault-Acco. les may be reprinted providing appropriate credit is given. Copies to the Editor would be appreciated.

IUCN COMMISSION ON EDUCATION ORGANIZED AN INTERNATIONAL WORKING MEETING IN NEVADA, U.S.A.

The international working meeting on "Environmental Education in the School Curriculum", organized by the IUCN Commission on Education under the sponsorship of UNESCO and of the hosting Institute as a part of the UNESCO's International Education Year at the Foresta Institute for Ocean and Mountain Studies, Carson City, Nevada, U.S.A., was attended by 20 delegates from 14 countries of 4 continents.

The Final Report of this meeting is being sent out together with this Newsletter. We hope that it will be studied carefully and that the conclusions can be implemented, not only in the countries represented at the meeting, but far more widely.

WHAT IS ENVIRONMENTAL EDUCATION?

"Environmental education is the process of recognizing values and clarifying concepts in order to develop skills and attitudes necessary to understand and appreciate the interrelatedness among man, his culture and his biophysical surroundings. Environmental education also entails practice in decisionmaking and self-formulation of a code of behavior about issues concerning environmental quality".

-- B. Ray Horn
Department of Outdoor
Teacher Education
Northern Illinois University
January, 1970

This remarkable definition has been proposed by the Northern Illinois University, U.S.A., and has been accepted and recommended for wide use by all the participants of the international working meeting on "Environmental Education in the School Curriculum".

NATURE CONSERVATION IN TEACHING AND SOCIAL EDUCATION IN POLAND

The contemporary, current outpouring of the reports concerning nature conservation call to mind avalanche phenomena, and it is rather difficult to define them otherwise. Commentators, journalists and publicists of every kind have raised an alarm about the conservation of natural resources, not solely in their own countries but throughout the world.

It seems without doubt, to be an echo of the appeal made by the U.N.O.'s General Secretary U Thant on one side, and a show of strength by public opinion on the other, both apparently recognizing the legitimacy of the assumptions and warnings.

Since we truly "live in nature" as a biological species, even a superficial observation of environment enables anyone to perceive the results of incongruous technocratic activities, the misdeeds which have been perpetrated by mankind and are still being perpetrated in the service of his own temporary convenience. Protective and preventive action is an urgent need of the moment.

It appears that the action should run along two basic lines:

- (1) That of political and economic recognition of the importance of the conservation of Earth's biosphere, i.e. to the conservation of the entirety of man's biotope that is being continuously formed out of complex and largely hard to regenerate elements;
- (2) and that of instructing and educating society in the knowledge of nature, as well as inculcating in society love and respect for the universal values and beauties of nature, an intrinsic part of which is man himself.

As the ideology of nature conservation has undergone and is still undergoing some revolutionary changes, it is perhaps worth while to consider succintly the principles of modern nature conservation as a separate branch of knowledge still being formed.

School Teaching of Nature Conservation in Poland

Education finds itself in a predicament because of the huge material, recognized as necessary, to be conveyed to school children. Therefore, each required change in syllabus, and in particular the introduction of any new activities, should be considered with restraint. It is easy to set up programmes and demand expert teaching, but it is far more difficult to secure the object in view, i.e. to teach successfully.

The required results of instruction are not to be expected unless they are preceded by efforts to teach efficiently and convincingly. To be sure, there will also be some results when mere discipline is maintained and examinations duly performed.



But the results will, however, always be out of proportion to those obtained with the attending interest of students and the aroused love of the subject.

Principal Trends in School Teaching of Nature Conservation

I. In primary schools:

- (a) Arousing a keen interest in children concerning plants and animals and their need for protection.
- (b) Arousing a keen interest in the inseparability of the living organisms from water, soil and air environment.

II. In secondary schools:

- (a) Up-to-date conservation of species.
- (b) Preservation and conservation in national parks and reserves.
- (c) Preservation of environment through a rational management of natural resources and landscape.

III. In higher education:

- (a) History of the development of nature conservation.
 - (b) Division, economy and conservation of biosphere.
 - (c) Organization and legislation of nature conservation.
 - (d) The conservation of nature in the world and own country.

There is an urgent need to train highly specialized educationalists as well as experts in environmental conservation in various fields of economy, in which the scientific rudiments of safeguarding nature should be initiated, just as it is being done in Sweden where each production and service unit is based on the fact that all our economy is carried on in nature. The adviser-biologists ought to be trained in special courses and receive instruction in nature conservation within the range of:

- 1. Conservation of water, atmosphere, soil and vegetation.
- 2. Forests management, agriculture, horticulture and water administration.
- 3. Industrial and mining management, and that of other technologies.
- 4. Dangers to the biosphere: chemical, radioactivity, land drainage, pollution of air and soil, erosion and others.
- 5. Social demographic, food/catering/ and health problems.

All teaching and training in the field of nature conservation should not, despite special traits arising through a specific interpretation of materials, problems and phenomena, expound each particular discipline in too great details.

In the modern concept of nature conservation the impact of almost all fields of knowledge are of interest, not only those proceeding from the realm of biology, but also from the



humanities and technology. It is undoubtedly right to assert that technology, unless it is to bring about the annihilation of mankind, ought to find remedies against the technological destruction of biosphere. Nature conservation should inspire and establish just such views and attitudes, just such indispensable knowledge through its trained specialists.

<u>Problems Regarding the Furthering of Knowledge</u> about Nature Conservation

In many countries, including Poland a social conviction about the necessity of nature conservation is becoming prevalent. In recent years, as a result of the press, radio and television campaigns, these views have been widely spread. There has always been, however, an urgent and important need to promote, persistently and judiciously, preservation of environment rather than simple nature conservation.

A huge mass of industrial and mining destructions create new situations in which the peculiarities of preservation of nature - while still important - recedes into the background in the face of the necessity to manage environment sensibly. Places of concentrated devastation make perfect examples for demonstrations and instruction in nature conservation and on the management of environment.

Understanding the biosphere as a unique environmental complex in which normal changes and life phenomena may take place is the main purpose of teaching. The delusive utopias and sick fancies of technocrats about the possibility of finding another biosphere in the cosmos that will enable the development of man's social life should be rebuffed. These are exceptionally dangerous, demobilizing and groundless statements, though, unfortunately, they are made even by people of some scientific authority. The aureole and hale of pioneering and mystery surrounding this kind of publicity is harmful to objective knowledge and education in the field of nature conservation.

Many a time in educational publications for children and young people we come across some quasi-fantastic though suggestive communications about man's ability to adjust to technicalization of living conditions, e.g. to nutritative pills, excessive velocities, noise, etc., whereas there is little genuine information in these domains. A vision of "man of the future" living in a fictitious biosphere, co-operating with robots, conquering some other worlds through technology - has been conjured by technocrats.

Those figments of the mind can and ought to be counteracted by matter-of-fact information about the source of wide-spread leukemias, allergies, neoplasms, neuroses and other so-called "civilization diseases". What is chemical feeding like -- or rather poisoning of man? What is being bred by physical, psychical and mental isolation from nature? There is definitely too little of such information and teaching.



We may boldly assert that nature conservation in the field of education has come to the fore. And yet, both ours and world's economists, who have not been able heretofore to outstep the range of utilitarian questions, still move about in the circle of problems, unconcerned and smug, shut out from reality of nature by a barrier of environmental ignorance synantropisation. Economical profits of man, so poor when compared with resources of nature (the latter being, however, exhaustible even when taken jointly with atmosphere, hydrosphere, soil, etc.), are out of proportion in the very terms of economy to the losses of man resulting from a bad management of nature and in nature.

The problems like these presented to the general public as a subject of universal teaching and publicity with aptitude and in an interesting and matter-of-fact manner by carefully selected lecturers, as well as a wise application of mass media - can favourably alter the situation.

Nature conservation is not just preservation of butterflies, flora and beautiful scenery; it is a discipline of warning and actual methods of action for highly civilised communities, so conceived as to enable them to benefit from conveniences of technology. The broad public should be convinced by the arguments.

It may be noted from the practical point of view, that universality of education is the most important asset in the tactics of nature conservation. The adequate legislation, organization, administration and the solid foundations of prognostic sciences are also of great importance. The more education leads to understanding and proper evaluation of the occurring phenomenas, the more it is universal, the better it will safeguard mankind against the actually impending annihilation of biotopes. One single man, ecologically ignorant, even though he may be an outstanding expert: engineer, planner or economist, can bring about biosphere destruction on a large scale. In this connection, it is to be emphasized once more that the decisions concerning environmental management should only be nade jointly, with engineers or others and highly qualified naturalists participating therein.

Many times specialists in nature conservation have met with an attitude taken by social workers, diplomats, authorities and various groups and persons, which might be termed as slightly indulgent or distinctly disparaging. Our campaign so far has not found an adequate place in the sphere of cultural, political and diplomatic interests. Nature conservation has, however, secured for itself a moderate place in general education and trends, on the whole, towards still greater success.

In the future, not even one province of man's life and activity should exist where the idea of nature conservation could not find a proper place. The due appreciation of society through understanding the need for man's protection, for ensuring him



adequate environments, is a sufficient argument for the demand.

At the present, nature conservation is taught at our universities but in the departments of biology, and quite cursorily. The teaching of this subject at our agricultural colleges is considerably better. At the Forest Departments nature conservation is a vocational subject, whereas the subject "nature conservation and afforestation" is taught in engineer courses of the agricultural departments for one term. In July, 1969, the first small Postgraduate Department of Nature Conservation was brought into being in Poland. The best teaching standard of this subject can be found at the teachers training colleges. The subject is obligatory in intramural as well as on in-service courses, and it comprises full-year lectures, classes, seminars, excursions. It is not necessary to give the reasons for the importance of teaching nature conservation in schools of this kind.

The worst situation in conservation teaching can be found at technological colleges. The students at the Department of Water Constructions or at that of Architecture receive some sporadic instruction on nature conservation, as a rule only through the initiative of more enlightened teachers.

The unique seminar in this country on preservation of nature resources is conducted by Prof. Walery Goetel, Dr. Geol. at the Academy of Mining and Metallurgy, and another one on the subject of air conservation in the Technological University in Warsaw.

Conservation teaching is but marginally treated, and in most cases, is done at such schools as medical academies, economics, commercial, political, physical education colleges, and others.

Nature Conservation in Citizen Education

In comparison with many other nations and non-European communities Polish people on the whole take quite a favourable attitude to the idea of nature conservation.

The conservation of nature of our own country continues to be, despite the great interest in technology, a weighty and convincing argument in our campaign and activities, which ought not to be discarded and scrapped in the face of a new situation concerning the preservation of biotopes. As usual, the results of any such activity depend on initiator and naturalists themselves, on their skill and conviction about the rightness of their case, and also on their committment to it.

There are, indeed, few domains so appropriate for publicity and citizen education as nature conservation. In this sense, environmental conservation education ought to find universal support in the struggle with backwardness and regress which, unfortunately, is represented by wide circles of nature devastators throughout the world.



In the contemporary citizen education related to the problems of nature conservation the main centre of gravity should be shifted towards acting against detrimental influences exerted on habitats and biotopes. These problems deserve to be attended to by society with much vigilance and watchfulness. This task is, of course, immensely difficult, since the cause and lethal results of nature mismanagement to flora and fauna are often remote in space and even in time, e.g. the source of polluting a river with poisoning affluences — and shoals of dead fish, a factory giving forth a suffocating stench — and a standing forest doomed to perish by degrees, and the like. It accords, after all, with the laws of general biology, which should be known by officials, industrialists, workers, farmers, and many others.

It is comparatively easy to foresee the results of ravages done to nature by those who make decisions about the emission of poisons, sewage, industrial wastes or about making havoc of landscape by mining, industrial and water devastations. To decide on these issues in a due manner, the people ought at least to feel the need for consultation with specialists.

The main feature in the treatment of the contemporary conservation of ecosystems is a great difficulty in conveying some sensible information in the terms of citizen education. For this reason, therefore, the subject-matter of articles, talks, broadcasts and telecasts should to be selected skillfully for a start, and this refers, above all, to school lessons and to school editions which are as a rule, overburdened with information about technology and its miracles.

Properly developed citizen education in conservation of nature is one of the most important fields for educational activities. Special school classes dealing with the preservation of vernacular nature should be obligatory for teachers, tutors of student groups, educators and others. Moreover, the persons who are in charge of social and political departments of trade unions, as well as social organizations and institutions of mass propaganda ought to take pains to secure attractive and instructive broadcasts, meetings with workers in nature conservation, teaching aids and other means intended for educational purposes.

Stefan Myczkowski, D.For.Sc. Assistant Professor University of Agriculture Cracow, Poland

NEW UNIVERSITY COURSE "ENVIRONMENTAL CONSERVATION AND PLANNING" IN CZECHOSLOVAKIA

The problems connected with control and executing of a comprehensive environmental conservation and planning are gaining increasing significance on the world as well as in Czechoslovakia. The concept of a comprehensive environmental conservation and planning has appropriately developed with the growing technological, economic, ecological and sociological problems, as an entirely new branch with technological applications - Environmental Science.

The research methods of the Environmental Science are analogous to those of biophysical sciences - they observe, describe and explain phenomena occurring in its field, thus giving this science an empirical (experimental) character. Practical experience and controlled experiments form the basis of its knowledge, which in the course of time needs building up on scientific foundations. Individual phenomena and conceptions are to be quantitatively weighed and determined; subjective considerations must be excluded. The way leads over knowledge of universal laws, deduction of generalized principles and the setting up of an independent theory of the new discipline. The knowledge gained until now is insufficient to constitute a scientific environmental theory and it is therefore necessary to accept some hypothesis having only a presumptive validity.

The contents and scope of the discipline is given by the accepted definition of the comprehensive environmental conservation and planning which comes into existence as a synthesis of rational conservation and management of various resources of the biosphere that man makes use of for his own existence. The concept of planning consists in investigating the feasibility of a rational and useful shaping of man-inhabited space.

The above mentioned approach involves the multidisciplinary (interdisciplinary) character of the Environmental Science; its problems are raised by the manifold activities of human society that cannot be concentrated and - probably also in the future - can only be purposefully coordinated (e.g. a team work of highly qualified specialists - analysts). The contents of the environmental theory generally evolve through the synthesis of the technological, medical, agricultural, sylvicultural, chemical, biological and other disciplines.

The so-called "town and country planning" is to be considered as one of man's practical activities and one of operational decision-making in regional planning and so on.

The quickly increasing volume and range of problems in this field requires the specialists accounting in their working areas for a valid treatment of practical tasks to complete individually the needed knowledge. This approach often does



not contribute sufficiently to the final high-quality decision-making, especially in the field of investment activity.

On the grounds of the above mentioned reasons and in accordance with the conclusions of UNESCO's various recommendations it appears necessary to plan the specialists training in various professions dealing with biosphere as well as with education. Some experiments in a similar type of education that had been carried out hitherto in Czechoslovakia usually showed a subjective accent at the level of the organizing body, thus emphasizing only isolated parts of a comprehensive problem (e.g. special nature conservation, function of the forest, technology of waste water treatment, technology of exhalations, etc.). Even abroad no complex pattern of a comprehensive "environmental education" can so far be found, although this is felt as an acute requirement. What was successfully realized is more or less the first experiments and partial efforts.

The establishment of the Cabinet on Human Environment as a part of the Department of Irrigation and Drainage of the Technological University, Prague, in the academic year 1968-1969 should be considered as a contribution and manifestation of the efforts to solve the inadequate situation in environmental education at university level. 2 hour weekly courses on the principles of environmental theory in the academic year 1969-1970 have been launched for regular students in some extended programs of the water conservation branch. The contents of the lessons take into account the instructional program the students underwent during their study time and makes full use of the knowledge that was gained before. A thematically complete set of recommended papers for further study branches of the Building Faculty is under preparation taking into account the difference of the contents.

An important step towards a general improvement of in-service environmental education would be the executing of a proposal of the Czech Ministry of Construction and Technology to organize post-graduate courses for those who work in the field of environmental decision-making (e.g. officers of District Committee and Chief architects). The Cabinet on Human Environment has been commissioned to make arrangements and to organize the course; it is understood, that the course is to be part of the academic year 1970-1971 divided into two semesters (total 226 hours).

Following the syllabus, the educational themes are divided into subjects as follows:

- 1. Countryside and its exploitation by man.
- 2. Exploitation of natural resources.
- 3. Soil as natural resource.
- 4. Exploitation and wasting of water resources.
- 5. Harmful substances in the air.
- 6. Environment as a subject of town-planning.
- 7. Town and landscape planning.
- 8. Environmental hygiene.



9. Local environmental problems in Czechoslovakia.
10. Comprehensive environmental conservation in Czechoslovakia.

The lectures are completed by an indispensable series of seminars, excursions, visits to laboratories, instructive film shows, etc. The lessons are given on the one hand by the professional staff of the Faculty of Building (Chairs of Town-Planning, Sanitary Engineering, Land Reclamation, Geodesy and Land Improvement), and on the other hand by staffs of some 15 cooperating organizations, such as: The Institute of Creation and Preservation of Landscape of the Czechoslovak Academy of Sciences in Prague, The Institute of Hygiene in Prague, The Czechoslovak Institute for Regional Planning "TERPLAN" in Prague, The Ministry of Building and Technology of the Czech Socialist Republic, The State Institute for Care of Relics and Conservation of Nature in Prague.

The Cabinet on Human Environment has been commissioned with all the administration and organization tasks of the course, as well as with establishing the course's secretariat. A group of 25 students is expected to attend the first term of the course. In accordance with the results achieved and experience gained the following term of the post-graduate study will be prepared.

Ing. Josef Riha, CSc.
Cabinet on Human Environment
Technological University
Prague, Czechoslovakia

ENVIRONMENTAL EDUCATION THROUGHOUT THE WORLD

AUSTRALIA

- Establishing Field Studies Centres in Australia

This is not only the title of the "Special Publication No. 4" of the Australian Conservation Foundation (member of IUCN) of 1970 written by R.D. Piesse and A.A. Strom, but also a realistic goal of present efforts in Australia. Field study centres are presented as a component of modern trends in science education which they actually no doubt are. Mainly based on the remarkable year-long experience of the U.K. Field Studies Council, the Australian Conservation Foundation now recommends "that an Australian Field Studies Council, incorporated as a national non-profit educational body, be formed along the broad lines of the Field Studies Council for England and Wales".

CZECHOSLOVAKIA

- Flora Preservation Through Education



Education has been given a full credit during the recent IUCN-sponsored (as a part of the "International Conservation Quinquennium) European International conference "The Flora and the Man in the 20th Century" (on modern tasks of flora conservation). Besides a proper scientific research, the implementation is needed, provided through legislation, habitats and ecosystems management (both natural and cultural, protected and not specially protected) and through education. Mr. Heinz van Bohemen from the Netherlands gave an interesting talk on school and childrens' gardens in his country and their services in specific elements of environmental education. The East-Bohemian Museum at Pardubice, host to the Conference held July 26 throughout August 1, 1970, organized in cooperation with the IUCN Commission on Education an interesting exhibition of scientific and educational materials concerning plant species conservation, with rich documentation received from Bulgaria, Czechoslovakia, Finland, German Democratic Republic, Netherlands, Poland and Sweden.

GERMAN DEMOCRATIC REPUBLIC

- Conservation Competition Attractive for High School Students

In the district of Hoyerswerda (according to a report by Siegfried Lange and Gunter Zscharnack in the No. 1-3, 700 5th - 1969 Volume of the regional journal "Naturschutzarbeit in Berlin und Brandenburg conservation competitions for high school students are organized regularly since 1994 1962 in close cooperation between schools and educational 'authorities, the nature-friends from the German Cultural Union and the district department of the State Nature Conservancy. An increasing number of students participate in these competitions. While in 1964 their number reached 20 only and the organizers doubted whether it would be worthwhile continuing, by 1968 the number of students participating actively reached 3,865. The winners who submitted best conservation works are awarded by field-glasses, interesting excursions and books.

ITALY

One Million Lires for Best Popular Book on Ecology

The international cultural revue "Ulisse" (Director, Maria Luisa Astaldi) established in 1949 the European Award "Cortina Ulisse" concerning the best works in the field of presentation and dissemination of science. The first book to gain one million lires in 1949 was John Read's "A Direct Entry to Organic Chemistry"; this year it was the "Le monde est-il surpeuple?" by Edouard Bonnefous. The 17th European Award "Cortina Ulisse", for 1971, should be ascribed to a work dealing with actual problems of ecology (man and his environment, the mutual relations and alternations). The Jury will consider only original titles published the first time in Europe during the last five years, which will be



forwarded by the author or by the publishers to the President Director of Revue Ulisse - Sezione Premio europeo Cortina Ulisse, Via Sardegna, 40, 00187 Roma, Italia, before the 31st of January 1971.

KENYA

Wild Life Clubs Develop their Activities in Kenyan Secondary Schools

The Kenyan school Wild Life Clubs held their first field seminar this year. These extra-curricular conservation groups are spreading all over Kenya, being organized in secondary schools with the support of teachers and guided from a small secretariat at the National Museum of Kenya at Nairobi. Although the original interest of the clubs' members was the "wildlife" in its classical sense (big game, national parks and sanctuaries), the students are now getting more and more involved in study of and care for the local environment. The interest is great, but there is a great lack of equipment (field-glasses, cameras, literature, etc.). Anyone in a position to provide some assistance and support, is requested to contact the IUCN Education Office in Morges, Switzerland.

NETHERLANDS

15th General Assembly of IYF held in the Netherlands The International Youth Federation for Environmental Studies and Conservation - a youth organization, unique of its kind, closely associated with IUCN - held its fifteenth General Assembly in Oosterend, on the Dutch isle of Terschelling, August 1 through 15, 1970. Some 40 participants from 11 countries - 10 European and 1 North American - attended the meeting. A detailed report is planned for the next issue of the Newsletter.

POLAND

University Students Meet to Discuss Environmental Issues

The International Symposium on "Academical Youth and Conservation of Nature" took place in Warsaw from 3 to 5 December, 1969, organized by The Polish Student Union under the sponsorship of the Minister of Education of the Polish People's Republic.

100 200 participants - representing agricultural colleges, polytechnicums, universities and medical academies as well as 8 delegates from Czechoslovakia, Rumania, Hungary and the German Democratic Republic gathered for discussions on environmental issues.

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Here are the main headings presented by the Polish students:

Importance of nature conservation at the recent stage of the civilization development.



- Economic planning and nature conservation.
- Conservation of nature and tourism.
- The influence of industrialization on environment.

The foreign representatives referred to:

- The movement of nature conservation in the German Democratic Republic (R. Steffens, GDR).
- Conservation of water in relation to pollution in the Rumanian Socialist Republic (A. Gaghes, Rumania).
- Problems relating to nature reserves in Slovakia with particular emphasis on forest reserves (L. Paule, Czechoslovakia).
- Problems of air pollucion in highly industrialized regions (F. Mala, Czechoslovakia).
- Students and conservation of nature in the Hungarian People's Republic (P. Eross, Hungary).

As preparation for the Symposium, summer programme was organized for the Polish students, they lasted for two weeks, during this time the participants were given the possibility of getting acquainted with the environmental problems in the field. The most remarkable venture was the study camp which took place in the following national parks: Tatra, Ojcow, and Pieniny, the three parks attracting the biggest number of tourists. The participants studied the relationship of nature conservation and tourism with special reference to the educational role of national parks as well as to the damages caused in natural environment by too busy tourist traffic and use.

After the Symposium an interesting excursion was organized to the Bielowiezha National Park. The Symposium was organized in cooperation with the East-European Committee of the IUCN Commission on Education, whose Chairman served as scientific consultant to the study camp in the National Parks.

The initiators of this Symposium plan to organize similar meetings every 2-3 years.

RUMANIA

- Children and Youth Science Education Internationally

This summer, the Rumanian organizations prepared and conducted two very important international meetings. First of them, international education conference "Child's Education as Related to the Contemporary Progress of Science and Technology", was organized, for representatives of Young Pioneers Organizations mainly, by the National Council of Young Pioneers of Rumanian Socialist Republic in cooperation with the I.C.C. (International Coordinating Committee for the Presentation of Science and the Development of Out-of-School Scientific Activities, Brussels, Belgium). At the congress, held in Bucarest during the last but one week of July 1970, the Secretary



of East-Europe Committee, Mrs. Maria Lexova, presented the sensitively accepted report on environmental challenge to childrens' organizations prepared by the IUCN Commission on Education. The second important meeting was an international youth conservation camp, first of this kind in Rumania, which took place in the famous National Park Retezat in the Carpathians in the second half of August.

UNITED KINGDOM

- European Professional Youth Leaders Introduced to Nature Conservation

Some 30 leading youth leaders from various organizations and departments from 15 European countries gathered in Homerton College, Cambridge, England, to attend in the days July 14 through July 23, 1970, a course on "The Introduction of Professional Youth Leaders to Nature Conservation". The course was carefully prepared by the British organizers (the U.K. Department of Education and Science) jointly with the Council of Europe - Committee for Out-of-School Education and Cultural Development and European Committee for the Conservation of Nature and Natural Resources - as a venture within the 1970 European Conservation Year. Leading officers of both bodies (Mr. F.A. Harper of the Department of Education and Science, Dr. Gerhard Neumann, Deputy Director of Education, Council of Europe) delivered the opening addresses. Lectures, discussions and excursions filled in the busy schedule of the ten days. Mr. Robert E. Boote, Deputy Director of the British Nature Conservancy and top-person of the European Conservation Year, explained to the participants the recent European problems of environmental crisis as well as the policy and strategy needed to achieve positive solutions. Lectures on "Conservation and Young People in Europe" were presented by Dr. Jan Cerovsky (IUCN, Morges) and Mr. Francis Wattier (I.C.C., Brussels). Mr. Philip Oswald (Secretary, North-West Europe Committee of the IUCN Commission on Education) was on the Directing Staff of the course.

U.S.A.

Environmental Education, Lorado Taft Field Campus at Northern Illinois University

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The need to increased environmental education programs on the university level is particularly pertinent at this time. There are also specific needs to conduct research and to accelerate the exposure of future inservice teachers to environmental concerns and their associated social problems.

The policy makers of tomorrow are the children in our elementary and secondary schools and the youth in our universities today. It is difficult for a voting citizen



of today or tomorrow to respond to decision alternatives with which he is unfamiliar. Based upon these premises and others Northern Illinois University established in 1954 a Department of Outdoor Teacher Education which is housed at the University's Lorado Taft Field Campus, a one hundred-forty acre outdoor laboratory situated near Oregon, Illinois.

The backbone of this systematically evolving program is the preparation of future teachers to utilize outdoor environment as a learning resource. Focusing on ecological approaches to environmental understanding and drawing upon multidisciplinary resources, the environmental study center directs imaginative programs for students from the social sciences, physical sciences, biological sciences, fine arts, industry and technology. The Department of Outdoor Teacher Education also conducts an international program, taking students abroad for first-hand study of European Outdoor Education programs.

The Department hosts at the Field Campus local, regional, and national conferences and workshops in the broad field of conservation and environmental education.

- Ferguson Sets Up Environmental Education Advisory Board

J.G. Ferguson Publishing Company, of Chicago, Illinois, a subsidiary of Doubleday & Company, Inc., and one of the leading publishers in environmental education, has formed an Environmental Education Advisory Board made up of some of the nation's leading environmentalists and authors.

Under the general supervision of Dr. Matthew J. Brennan, the Board collectively and individually will assist J.G. Ferguson in the formulation of policy for a complete environmental education program for teachers, students, and parents.

Dr. Brennan is the editor of, PEOPLE AND THEIR ENVIRONMENT, a Series of teachers' curriculum guides to conservation education, and Consultant, Environmental Education Studies Staff, Office of the Commissioner, United States Office of Education.

Other members of the Ferguson-Doubleday Environmental Advisory Board are:

Dr. Phyllis Busch, Director, Project SPRUCE, Pine Plains, New York; author: LIONS IN THE GRASS (World).

Dr. Wilson F. Clark, Past President, Conservation Education Association; Chairman, Division of Science, Eastern Montana College of Education.

Mr. Albert H.H. Dorsey, Chief Supervisor, Curriculum

Development Section, South Carolina Department of Education and, formerly Coordinator, South Carolina Conservation Curriculum Improvement Project.

Mr. John W. Hundley, Executive Director, Foundation Advisory Services; Editorial Board, Catalyst Magazine.

Mrs. Martha Munzer, Education Associate, Wave Hill Center for Environmental Studies, Bronx, New York; author: UNUSUAL CAREERS, PLANNING OUR TOWN, POCKETS OF HOPE (Knopf).

Dr. James A. Oliver, Director, New York Acquarium; author: NATURAL HISTORY OF NORTH AMERICAN AMPHIBIANS AND REPTILES (Van Nostrand), SNAKES IN FACT AND FICTION (Macmillan).

Mr. Richard Pough, President, Natural Area Council, New York; author: AUDUBON LAND BIRD GUIDE, AUDUBON WATER BIRD GUIDE, AUDUBON WESTERN BIRD GUIDE; (Doubleday); Editorial Board, Catalyst Magazine.

Mr. Charles E. Roth, Director of Education, Hathaway School of Conservation Education, Massachusetts Audubon Society.

Dr. V. Eugene Vivian, Director, Conservation and Environmental Science Center, Browns Mills, New Jersey.

Mr. William H. Whyte, Conservationist and author, THE LAST LANDSCAPE, THE ORGANIZATION MAN (Doubleday).

J.G. Ferguson entered the environmental education field with the publication of, PEOPLE AND THEIR ENVIRONMENT. These guides are now in use in over 72,000 classrooms throughout the United States.

In addition to initiating and producing materials on their own, the Ferguson Company will draw upon the complete resources of Doubleday & Company, Inc., including Doubleday Multimedia, Doubleday Publishing, and Natural History Press.

U.S.S.R.

Conservation Course at Teacher Training Colleges Obligatory

The Ministry of Education of USSR approved recently syllabus of conservation course for the Soviet Pedagogical Institutes (Teachers Training Colleges). The syllabus was prepared by Prof. A.V. Mikheyev and Dr. V.M. Galushin (member, IUCN Commission on Education). Since autumn 1970, the conservation course becomes a compulsory part of teaching programme at all teachers training colleges all over the Soviet Union.

- New Russian Conservation Text-Books

In 1969, the Moscow State University published (by offset) a lecture-series (based on an university course)



"Conservation of Nature" by Prof. N.A. Gladkov (member, East-Europe Committee, IUCN Commission on Education). The Chairman of the IUCN Commission on Education, Director of the Central Laboratory on Nature Conservation of the USSR Ministry of Agriculture, Dr. L.K. Shaposhnikov gave to printers his manuscript "The Problems of Nature Conservation". This is to be published as a text-book for in-service teachers training. The first university text-book on nature conservation in the U.S.S.R. was issued in Tomsk, Siberia, written by I.P. Laptyev, Professor of the University of Tomsk. Now, the second edition is expected in due time. (Prof. Laptyev also sent to IUCN a paper on his experience of conservation teaching at the Tomsk University. This will be published in the next issue of the Newsletter).

- New Environmental Education Council Set Up in Moscow

A joint meeting of the Presidium of the Academy of Sciences of U.S.S.R. and the Presidium of the All-Russian Society for Conservation of Nature, held on December 3, 1969, adopted important decisions concerning environmental conservation teaching. Based on those decisions, in 1970 the Council for Study of Educational Problems in Nature Conservation was established, under the Chairmanship of Prof. N.A. Gladkov.

EDUCATIONAL PUBLICATIONS

Reviewed (unless otherwise mentioned) by Professor Tom Harrisson, Senior Research Associate of the South East Asia Program, Cornell University, Ithaca, New York, U.S.A.

JOFFE, Joyce (1969) Conservation. Aldus Books, London, 36/-.

This is the third and last in the worthwhile series <u>Interdependence</u> in <u>Nature</u> from Aldus Books, the scope and effect of which has been outlined for the first in the series (see Keith Reid, review, below; also J.A. Lauwerys). For this volume Dr. F. Fraser Darling has acted as Consultant.

Miss Joffe, whose credentials are not identified by the publishers, has done a straightforward job of presenting her subject. The first two chapters "Hunters and Visionaries" and "A.B.C. of Ecology" - overlap with the Lauwerys and Reid volumes respectively, though they are none the worse for that. Fresher material follows with a considerable emphasis on conservation by captivity (Chapter 5 and elsewhere). There is a good, clear account of how the Survival Service Commission works through the Red Data Books (p. 89), though one cannot help wishing here for a picture of the crowded IUCN quarters at Morges - nothing of that kind has yet been encountered in any of these books, although the conditions in which conservationists have to work is very much a part of the ecosystem and



directly affects the results. Not to belittle unfairly this nice book's illustrations however, let it at once be added that it contains several very unusual pictures, including an elephant embryo left from the hunters' butchery (p. 117) and a poacher's cache of elephant tusks beautifully photographed plus several vivid pictures of that quintessential endproduct in manly ecosystems, the slum, in Brazil, America and Hongkong unforgettably. Maybe we need more authoresses with no special pretensions to show us other by-ways in the labyrinth of conservational concern and distress.

Note by the editor: Since May 1970, conditions have considerably improved because of the move of the WWF into new headquarters, also in Morges.

REID, Keith (1969) Nature's Network. Aldus Books, London.

This is the first in a series of three pleasant, wide-paged, neatly produced volumes in a series on "Interdependence in Nature" produced by the Aldus Press Organization which previously gave us the Modern Knowledge series of 16 volumes. The volumes are printed on art paper by Arnoldo Mondadori, Verona, Italy. Alec Lawrie is the series editor and Victor Shreeve the Art Director. The many plate and text illustrations are goof throughout, the diagrams sometimes originally imaginative. Oddly enough the most conventional and unimaginative feature of this and the other two volumes is the cover design - here a curious but somehow stale-coloured flash picture of an owl about to strike a rat suitably positioned upon a moss-grown rock.

This volume deals primarily and simply enough with ecology and its collateral vogue-themes like ecosystems, biotopes and so on. The series is designed for "Students in Sixth Forms", who are well served in the results. Mr. Reid is a teacher and entomologist. He has made a pleasant job of unravelling Nature's Network for the young and not-so-young for whom this and the older series are recommended easy reading.

LAUWERYS, P.A. (1969) Man's Impact on Nature. Aldus Books, London, 36/-.

For this second volume in the <u>Interdependence in Nature</u> series (see Keith REID above), the Head of the Department of Comparative Education at the University of London's Institute of Education traces out the impact of pre-industrial man on his total environment then measures the terrific impact from the Industrial Revolution (p. 107) onward. These time-sequence treatments are pulled together in the end chapter, including some forceful writing on "The Poisoned Environment" (p. 161). "Too Many People" (p. 171) which flatly observes:

"Science and technology have greatly strengthened man's belief in his capacity to manipulate the environment to his own end, the belief that he is firmly in command of



his own destiny. The looming crisis of over-population and famine express the belief as illusion".

Such statements are not unfamiliar to our readers. But they have seldom been so well put at the popular level as by Preston Lauwerys in Man's Impact on Nature.

La Consulta a los Organismos Nacionales (UNESCO, U.I.C.N., Nature Conservation, P.N.U.D.); Informe de una mision, by Ricardo Gondelles. Consejo de Bienestar Rural (Apartado 61407) Caracas. (Free).

The author, a Venezuelan with a long involvement in conservation education reports on a mission sponsored by the Ministries of Education and Agriculture as well as the nongovernmental "Consejo de Bienestar Rural" of which he is a senior staff member. The purpose was to describe the work and the accomplishment of the four organizations listed in the title, and discuss their implications for a stronger conservation action in Venezuela, particularly in the field of environmental education.

The book contains much useful information on the <u>modus</u> operandi of these organizations. It also describes other conservation programmes such as those connected with the Council of Europe and the World Wildlife Fund and some local groups in the United Kingdom. However, it is regrettable that F.A.O. has largely been ignored.

The report not only gives up-to-date information on what is being achieved by the leading organizations but it clearly points out to the many possibilities that are available if the country makes an adequate plea. While visiting the officials of the United Nations Development Program (U.N.D.P., rendered as P.N.U.D. in Spanish, as in the title), the author discovered that there was a distinct possibility to direct the unused remanent of technical assistance money earmarked for Venezuela for a conservation education project in that country. This corresponded to U.S.\$ 110.000, not a meager amount!

This information should be particularly useful for conservationists in Latin America and other areas where Spanish is spoken and who need to know about programmes of, and resources made available by, international organizations. (Reviewed by Dr. G. Budowski, Director-General, IUCN).

Forum on "Protection and improvement of the native fauna" in Caracas.

On 16-17 July, 1970, the "Asociacion Nacional para la Defensa de la Naturaleza" and the "Sociedad Venezolana de Ciencias Naturales" organized this important meeting which was cosponsored by the "Consejo de Bienestar Rural".

Among the papers presented the following were noted of particular



interest to Conservation Education:

the state of the state of "El uso de television y de otros medios audovisuales complementarios en la divulgación de la conservación de los recursos faunisticos en Venezula" by Carlos Rivero.

"Educacion universitaria para la formación de ecologos especializados en manejo de fauna silvestre (wildlife ecologyst), by Dr. George Cornwell.

"La conservacion de la fauna silvestre a la luz de la nueva ecologia" by Jorge E. Rabinovich.

"Conservacion y manejo de la fauna sylvestre" by "Sociedad de Ciencias 'Naturales La Salle".

For further information and copies of papers it is suggested to write to Consejo de Bienestar Rural, Apartado de Correos 61407, Caracas, Venezuela.

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